

Pollution Prevention Practices in Auto Body and Paint Shops

Sanding Waste Management

Sanding body panels is essential for proper surface preparation and to promote paint adhesion. The process produces airborne dust particles from body filler, welding, body surface, and old coatings. These fine particles are inhaled by workers and may cause health or breathing problems. Sanding waste may be toxic if it contains heavy metals such as cadmium, chromium, nickel, copper, lead, and zinc. Exposure to these toxic contaminants can cause serious illness to workers and the toxic particles may be taken home on clothing. If not collected, sanding dust is tracked around the shop floor and to outside areas. Sanding waste should not be tracked or washed to areas outside the shop, even if the sanding dust is considered nonhazardous.

Dry Sanding Best Practices

Dry sanding is preferred over wet sanding because it does not introduce an additional waste stream, contaminated water.

- Use vacuum sanding to collect dust as you work. Many sanding tools are available for every kind of job. This practice will reduce clean up time and reduce worker exposure to airborne pollutants. Some examples are:
 - A high velocity, low volume (HVLV) ventilated sanding system;
 - A vacuum unit with HEPA filtration; and
 - A low cost portable vacuum or a commercial grade vacuum system with HEPA filtration.
- Collect dust as sanding tasks are completed to prevent tracking to areas inside and outside the shop.
- Do not wash dust to the ground outside the shop or into storm drains.
- Avoid excessive sweeping which will send small particles into the air to be inhaled.
- Sand only in designated areas to avoid spreading the waste around the shop.
- Wear disposable (tyvek) or cloth coveralls and leave them at work to prevent toxic particles from being taken home.
- Protect your health by wearing a respirator. Be sure staff is properly trained, fit tested, and have regular medical monitoring. See the Health and Safety fact sheet for more information.

Wet Sanding Best Practices

If you need to wet sand some parts, such as bumpers, control the waste water so it does not flow to gutters, streets or storm drains.

- Use a spray bottle to wet a small surface area and collect it in a drip pan.
- Install a clarifier to collect wet sanding waste. This will separate the solids before discharging water to the sewer.
 - Be sure the clarifier is designed for your specific needs. For example, is the capacity and design of the clarifier adequate to separate solids?
 - Do not dispose of sludge or hazardous waste to the sewer.
 - Have clarifier sludge removed by a service contractor that properly disposes of the waste.
 - Dispose of clarifier sludge as hazardous waste unless you have done an analysis or have information showing that it is nonhazardous waste.
- Do not sweep or wash sanding dust to storm drains or outside areas.

For more information on oil/water separator maintenance, see the DTSC Fact Sheet "Oil/Water Separators" in the Pollution Prevention for Auto Repair and Fleet Maintenance Toolkit.
<http://www.dtsc.ca.gov/PollutionPrevention/VSR/upload/OilWaterSep02.pdf>



Drip pans collect wet sanding waste



Unmanaged sanding dust falls on the floor and is tracked out of the shop.



Most of the dust is collected with vacuum sanding.

Vendor Contact Information

(Other vendors may provide similar or identical products and services. Mention of trade names, products, or services does not convey, and should not be interpreted as conveying any government approval, endorsement, or recommendation.)

Equipment Trade Service Co. Inc.	http://www.etscompany.com/vacuum/index.html	877-824-7763	Vacuum systems
On Site Waste Management	http://www.onsitewastemgmt.com	800-255-6073	Vacuum systems
Eurovac	http://www.eurovac.com	800-265-3878	Vacuum systems
Precision for Collision	http://www.pfcequipment.com	800-922-5501	Vacuum systems
Dynabrade	http://www.dynabrade.com	800-828-7333	Vacuum sanding tools
Tiger-Vac Inc.	http://www.tiger-vac.com	800-668-4437	Vacuum sanding systems and industrial vacuum cleaners
Clayton	http://www.jclayton.com	800-248-8650	Vacuum sanding systems
Lab Safety Supply	http://www.labsafety.com	800-356-0783	"Dixie Econo-Dikes" containment used as drip pan for wet sanding

Is your sanding waste hazardous?

You may assume that all the sanding waste you generate is hazardous waste and manage and dispose of it as such. Disposable wipes, such as those used to wipe after sanding zinc-based primer, should also be assumed to be hazardous waste. If you work on older cars and/or do complete jobs, it is more likely that the sanding waste is hazardous.

Alternatively, you may test a minimum number of representative samples of your waste sanding dust and wipes to characterize the waste. If you determine that the waste is not hazardous, you need to show that your current process is consistent with those results. Follow the procedures listed in the box to determine if your sanding waste is hazardous.

See the “Hazardous Waste in Auto Body and Paint Shops” fact sheet for more information on hazardous waste determination.

How to determine if sanding waste is hazardous

- Find an accredited lab that tests environmental samples. Go to <http://www.dhs.ca.gov/ps/ls/elap/html/lablist.htm> or call (510) 540-2800 to find an accredited lab.
- Work with the lab to identify sampling and testing criteria.
- Test for total metals limit concentrations (TTLC).
- Test for soluble threshold limit concentrations (STLC), if necessary.
- Take representative samples on at least 2 different occasions and send them to the lab.
- Keep test results in shop records and make them available upon request to local and state inspectors.
- If you have questions, contact your local hazardous waste agency.
<http://www.calepa.ca.gov/CUPA/CUPAMail.htm>

Hazardous Waste Regulatory Requirements

For information on regulatory requirements contact your local [CUPA](http://www.calepa.ca.gov) online at http://www.dtsc.ca.gov/InformationResources/local_contacts.cfm or contact the [Department of Toxic Substances Control \(DTSC\)](http://www.dtsc.ca.gov) at (800) 728-6942, http://www.dtsc.ca.gov/ContactDTSC/duty_officers.cfm

To get an EPA ID number, contact:

DTSC
Generator Information Services Unit
(916) 255-1136
(800) 618-6942

For additional information on auto body and paint shop pollution prevention practices and a list of available publications contact:

DTSC
Office of Pollution Prevention and Technology Development
P.O. Box 806
Sacramento, CA 95812-0806
(916) 322-3670
(800) 700-5854
<http://www.dtsc.ca.gov/PollutionPrevention/index.cfm>

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